

#### DETAILED ACTION

##### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 19 December 2008 has been entered.

##### **Status of the Claims**

2. Claims 2 and 6 have been cancelled.
3. Claims 1, 3, 5, 7, 8, 20, 22, 24 and 25 have been amended.
4. All pending claims 1, 3, 5, 7-8 and 20-25 have been examined in this office action.
5. PTO-413 Interview Summary summarized our 19 December 2008 interview.

##### ***Response to Arguments***

6. Applicant's arguments filed 19 December 2008 have been fully considered but they are not persuasive.

7. Applicant argues that ***"Herz does not teach or suggest determining a dependency element specified for said product from among a plurality of dependency elements, each dependency element associated with a respective price determination policy and price trend table, essentially as claimed in Claims 1 and 5."*** Respectfully, the Examiner must disagree for the following reasons:

- Herz in at least paragraph [0029 and 0032] discloses the collection of profiles collected for characterizing shoppers (i.e. demographic and other consumer information purchased from a credit-card company, etc.) and the offers made to the shoppers (i.e. price, item, discount amount, etc.).
- Herz in at least paragraph [0037] using the probability of acceptance of an offer for calculating the expected profit from making a particular offer.

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- Herz in at least paragraph [0005] the use of attribute clustering to select, present, price, and promote goods and services tailored for an individual consumer. Herz further discloses determining price-points for a particular shopper and the profiling of offers based on attributes such as brand name, the sales pitch, the price and terms of payment.
- Herz in at least paragraph [0009] further discloses assisting a shopper by using shopper past purchase history related to sales, discounts, or other attractive prices on similar products.
- Herz in at least FIG.1, FIG.2, FIG.4, FIG.5A, and FIG.5B illustrates the automatic determination of customized prices and promotions. Herz in at least paragraph [0022, 0024 and 0027] further discloses the automatic determination of customized prices and promotions by using a plurality of databases, including, but not limited to: shopper database, offer database, shopper profile database, and shopper history database.
- Herz in at least paragraph [0162] further discloses the use of content based clustering for grouping offers or shoppers using non-associative attributes such as price, or size frequency.

8. Applicant further argues that the teaching of Freeny and Kaminsky do not cure the deficiency in Herz regarding ***“depending a dependency element, etc.”*** Respectfully, the Examiner must disagree; Herz for the reasons stated in Item 6 above does not have any deficiencies regarding ***“depending a dependency element, etc”***.

#### ***Claim Objections***

9. **Claim 3** is objected to because of the following informalities: there is an incorrectly spelled word in this phrase ***“current retail sales status information or bother,”*** Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 103***

10. **Claims 1, 3, 5, 7-8, and 20-25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Herz et al. (US 2001/0014868) hereafter known as Herz, in view of Freeny, Jr. (US 6,076,071) hereafter

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known as Freeny, and further in view of Kaminsky et al. (US 2001/0047308) hereafter known as Kaminsky.

**Claims 1 and 5:**

With regard to the limitations of a server:

- ***Retail Sales State Management means for managing retail sales state information for a product (sales history, purchase time and purchase price);***
- ***Price Setting means for determining a dependency element from a group of elements associated with a price determination policy and price trend table and dynamically setting a current retail price;***
- ***Product information provision for responding to user information requests for a product with current retail price of product and product information***

Herz shows, in FIG.1, FIG.2, FIG.4, FIG.5A, and FIG.5B a system for the automatic determination of customized prices and promotions. The primary functions of the system for the automatic determination of customized prices and promotions (price setting means) 100 are:

- 1) To identify offers that are appropriate for each shopper,
- 2) To help the shopper become informed about these available offers (product information provision means), and
- 3) To facilitate any or all of the necessary transactions, such as electronic ordering or payment (retail means), if the shopper decides to accept an offer.

Herz further discloses in at least paragraph [0029 and 0032] demographic and/or consumer information about the shopper or similar shoppers is obtained from other databases, e.g., from a consumer database purchased from a credit-card company, or a database that correlates the response to telemarketing campaigns with demographic variables. The main computer selects offers (paragraphs [0005 and 0162]) from the offer database that are likely to result in profitable sales (price trend means, basic rule of supply and demand). "Retail sales state" and means for managing it, as vaguely defined in applicant's specification, is shown throughout the reference in

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demand curves and more specifically in paragraph [0301], which states, "Time series methods are also useful for detecting trends: one could do a linear regression on sales for a certain product over time, determining the overall direction of a product's sales. This information could be used to adjust offer-generating strategies, as it would indicate a waxing or waning of a customer's overall interest in a given product." But, while the price may be reset and changed with time in Herz's system, it is not specifically disclosed that pricing is dynamically set per se, however Herz in at least paragraph [0022, 0024 and 0027] further discloses the automatic determination of customized prices and promotions by using a plurality of databases, including, but not limited to: shopper database, offer database, shopper profile database, and shopper history database. Herz in at least paragraph [0276] further discloses making dynamic offers to a customer at a particular price and having additional offers at a new price where the previous offer was rejected.

Herz does not disclose that any trend information regarding the pricing is displayed to the user. Herz in at least paragraph [0246] discloses the use of parameterized offers using price, a size, a price presentation, a sales pitch, an advertisement's visual style, etc. Herz in at least paragraph [0262] further discloses a shopper's records of purchases being used to generate promotions including price discounts, advertisements, or a shopping list.

However, Freeny in at least Column 3, lines 42-60 discloses a system which receives sales and inventory data and data from other sources to automatically change product prices. Freeny in at least Column 3, lines 66-67 and Column 4, lines 1-13 further discloses that product prices are dynamically adjusted at the checkout station, on message displays within the store, and etc. Freeny in at least Column 7, lines 63-67 and Column 8, lines 1-5 further discloses that the system detects the rate of purchase of each product and compares it to a predetermined limit and the price of each product is automatically adjusted upwards or downwards. Freeny in at least Column 8, lines 6-17 still further discloses that the system can automatically, based on the reduced supply of product, adjust the price of a product. Freeny does not specifically disclose providing the user with any pricing trend information.

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Kaminsky in at least paragraph [0020] discloses a system that permits a merchant to dynamically price a single product, a group of products or an entire website. Kaminsky in at least paragraph [0035] and Figure 3 further discloses a user being provided with price trend information.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the system of Herz so as to set the price of a product dynamically as taught by Freeny and to display the price trend information to the user in accordance with the teachings of Kaminsky, in order to generate more sales by urging the buyer to act quickly by giving the sense that the price being offered is a good deal and that it would not last for long.

**Claims 3, 7-8 and 20-21:**

With regard to the limitations:

- ***Price determination policy specified conditions and parameters for dynamically changing the retail price of a product according to a number of units sold;***
- ***Where the retail price of the product increases as the number of units sold increases;***
- ***Where the retail price of the product decreases as the number of products sold decreases.***

Herz in at least paragraph [0244] discloses an alternate method for automatically selecting and presenting a spectrum of different price values to ascertain the price/demand relationship, but does specifically disclose the usage of the price/demand relationship to dynamically change the retail price of a product. Freeny in at least Column 3, lines 41-60 discloses utilizing sales and inventory data, pricing and advertising data provided by the product supplier and competition price data to automatically change product prices at the physical store systems. Freeny in at least Column 7, lines 63-67 and Column 8, lines 1-17 further discloses dynamically adjusting the price of a product based on the rate of purchase (demand) for the product. The system computer can automatically increase the price of the product based on the reduced supply of the product on the shelf or in inventory. The system computer can automatically decrease the price of a product

if the rate of purchase of a product falls below a predetermined limit. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the system of Herz so as to set the price of a product dynamically as taught by Freeny with the motivation of encouraging the sale of slow moving items while maximizing the profit generated from fast moving items.

**Claims 22-25:**

With regard to the limitations:

- ***Price determination policy specifies the conditions and parameters for changing the retail price according to a product's ranking information;***
- ***Where retail price increases as a product ranking increases;***
- ***Where retail price decreases as a product ranking decreases;***
- ***Where the ranking information is based on a retail sales ranking of the product or its popularity ranking.***

Herz in at least paragraph [0240] discloses that profit is equal to the quantity sold times the profit per unit. Herz in at least paragraph [0241] discloses making incremental changes in a product offering by varying the price up or down by a particular amount and floating the new offer to see whether it increases profits (quantity sold is directly related). Herz in at least paragraph [0243] further discloses the ranking of offers based on shopper interest in the offer. Freeny does not specifically address these limitations.

Kaminsky in at least paragraphs [0019, 0020 and 0021] discloses a dynamic pricing system where a buyer is permitted to request a lower price for an item than its current price.

Regarding ranking the popularity or evaluations of the products, while the pricing in Herz, Freeny and Kaminsky can be set based on the popularity of the items; the references do not specifically disclose ranking the items based on popularity or evaluations of the products. However, ranking items on the basis of their popularity or evaluations, then setting a price based on the ranking of a list of products for sale, is old and well known (Prior Art admitted under OFFICIAL NOTICE).

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Therefore it would have been obvious, to one of ordinary skill in the art, at the time of the invention, to have further modified the system of Herz so as to rank the items for sale in order of their popularity or evaluations, and set the price in accordance with the rank, as it is well known to do so, in order to generate more revenue by charging higher prices for more popular items.

### **Conclusion**

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL DANNEMAN whose telephone number is (571)270-1863. The examiner can normally be reached on Mon.-Thurs. 6AM-5PM Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Florian Zeender can be reached on 571-272-6790. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Paul Danneman/

Examiner, Art Unit 3627

5 February 2009

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Supervisory Patent Examiner, Art Unit 3627